AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A method for applying an image forming composition to one or more sides of a mesh fabric using a drop on demand ink printer, characterised in that the printer is operated at a fluid pressure of between 1 and 3.5 bar and that the image forming composition has a viscosity of less than 100 cp, the drop on demand ink jet printer comprises an array of nozzles, at least one solenoid valve to, in use, control the flow of the image forming composition through the nozzle orifices, a plunger of the at least one solenoid valve having a diameter of less than 2.5 mm.

2. (Original) A method according to claim 1 wherein the viscosity of the image forming composition is in the range of 5 to 20 cp.

3. (Currently Amended) A method according to claim 1 or claim 2 wherein the drop on demand ink jet printer comprises an array of nozzles, a solenoid valve to, in use, control the flow of the image forming composition through the nozzle orifices, the nozzle orifices having a diameter in the range of 20 to 200 μm~~, and in which the plunger of the solenoid valve has a diameter of less than 2.5 mm~~.

4. (Original) A method according to claim 3, wherein the nozzle orifices have a diameter in the range of substantially 40 to 60 μm for thin mesh fabric types.

5. (Original) A method according to any preceding claim wherein the drop on demand ink jet printer solenoid valve mechanisms for controlling the flow of fluid to the nozzle orifice comprises a plunger member journalled for axial reciprocation between a rest and an operative position within an electric coil under the influence of a magnetic field generated by that coil when an electric current passes through the coil, the distal end of the plunger extending into a valve head chamber having an outlet nozzle bore, the reciprocation of the plunger being adapted to open or close a fluid flow path from the valve head chamber through that bore, characterised in that:

a. the plunger is of a unitary construction and is made from an electromagnetically soft material having a saturation flux density greater than 1.4 Tesla, preferably about 1.6 to 1.8 Tesla, a coercivity of less than 0.25 ampere per metre, and a relative magnetic permeability in excess of 10,000; and

b. the nozzle bore leading from the valve head chamber to the nozzle orifice has a length to diameter ratio of less than 8:1, preferably from 1.5:1 to 5:1, notably from 2:1 to 4:1.

6. (Original) A method according to claim 5, wherein the valve is held in the open position for a prolonged period of time to print continuous lines on the mesh fabric.

7. (Currently Amended) A method according to claim 6, wherein the amplitude of the current flowing through the coil required to hold the plunger in the valve open position is surprisingly much less, typically 80 to 50% less, than the current required to move the plunger initially away from its rest position.